

Report on Medical Inspection and Sanitary Circumstances.

R.H. Parry, M.D., F.R.C.P., D.P.H., Medical Officer of Health
and Port Medical Officer of Health.

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This report is prepared, as in 1946, on the lines indicated in Memorandum 302/S.A. issued by the Ministry of Health to Port Health Authorities, and the narrative is referenced where appropriate to statistical tables in Appendix IX.

GENERAL

A port health department is not merely concerned with the detection and control of smallpox, typhus, cholera and other dangerous communicable diseases. Other diseases, more insidious in onset and quieter in their manifestations, but of greater social significance, find a rich soil amongst seafarers. This latter group of diseases, of which tuberculosis is an example, always flourishes best where there are defects in personal and environmental hygiene, and also, therefore, claim the attention of those whose concern is marine sanitation.

Diseases such as smallpox or cholera, having gained access via a seaport or an airport, can be effectively countered by the efficient application of prescribed public health measures. An epidemic of smallpox gains momentum for a time, and subsides. The Nation's problem is a temporary one and, with effective port control should never occur.

It would be well if the spread of tuberculosis amongst a population could be made to yield so promptly to planned counter-attack, but with this disease the progress is one of slow infiltration into the community. The national problem is a more lasting one and logical measures of control include the early recognition and treatment of all spreaders of the disease, and the eradication of conditions which might favour its development and spread.

Within the ranks of the Merchant Service lies a fertile source of infection which contributes, in no small measure, to the spread of this disease ashore. The high incidence of tuberculosis amongst seamen is a matter for concern; the problem is worthy of examination.

It may yet be premature to give an accurate picture of peacetime trends within the Merchant Service. Repeated crew examination throughout the year indicate, however, that the general health of crews, so well preserved during the war years, is being maintained. And yet, from time to time, there is brought to light evidence that another young merchant navy recruit has fallen victim to tuberculosis within a year or so of recruitment. More ominous in its significance is the occasional discovery of the more elderly sailor with open tuberculosis, giving a history of chronic cough of many years' duration. The relationship between cases of this kind is quite apparent, and has its parallel in other services. Clear evidence that the direct spread of tubercular infection occurs under present day conditions at sea is available within the records of this department.

Overcrowding, as in the slum areas, plays a leading part in the transmission of this disease. Fatigue and exposure, both sometimes inseparable from working conditions afloat, are important predisposing conditions. Alcoholism, the habit of spitting, and poor ventilation are other factors conducive to the development of pulmonary infection. Under such circumstances the chronic spreader of tubercle bacilli inevitably claims a toll of victims amongst his shipmates - and the further transmission of the disease to their associates ashore may only be a matter of time.

Nevertheless, there are welcome indications that increasing attention is being given by shipowners to the comfort and well-being of their crews. Many large firms are giving the lead and extensively improving the living accommodation in their ships. Spacing, ventilation, sleeping and messing arrangements are being adapted to conform to modern standards. Progress, since the days when "bilge water was considered part of the trade" and "when there was no heating except for the men's bodies - hence the more crowded, the more comfortable" has indeed been slow, but, at last, there is evidence of a speed up, and living conditions in newly constructed vessels are fast approaching the ideal. Environmental defects in ships are thus being removed, but other reforms long overdue must be carried out if the fullest advantage of this benefit is to be obtained.

First, there is need for a more stringent medical follow-up of seamen after entry into the Service, and in this respect mass radiography would be of incalculable value. The medical examination of seamen before joining a ship is sometimes too perfunctory. Sailors, employed in one of the nation's largest single industries, need a co-ordinated medical service akin to those of the fighting services, and this would be best operated in close conjunction with port health officials.

Next, there is need for more extensive health education amongst officers and crew of the Merchant Service. The ship's officer is given training in the principles of first-aid, but receives no instruction in the elements of marine hygiene; this could well be remedied. Discipline amongst the crew in matters of hygiene is poor, and sometimes absent. It should be tightened up. New vessels of high standard in other respects are often found with defects clearly indicative of slovenliness and ignorance of the fundamentals of hygiene. For example a pantry containing exposed food swarming with flies, might be regarded by the crew with complete indifference. Water closets are sometimes seen to be ill-maintained and filthy. Ventilators might be wilfully plugged with sacking with resultant air stagnation. There is scope for the appointment to every vessel of an officer trained to undertake responsibilities in matters of medical treatment and hygiene and specially designated to the task. At present these highly important duties are, as often as not, passed on to the chief steward, whose sole qualification might be the possession of a Board of Trade cook's ticket!

The mere re-housing of seamen is not enough.

VESSELS ENTERING THE PORT DURING THE YEAR (See Tables)

The number of arrivals from "Foreign" and the tonnage of cargoes that were handled at Bristol, Avonmouth and Portishead Docks during 1947 show an appreciable increase compared with the corresponding figures for 1946. This is very encouraging, particularly when it is realised that the import restrictions imposed during the year might well have had an adverse effect on the annual trade returns of the port, and especially since Bristol deals almost exclusively with imported cargoes.

During the year 708 foreign going merchant vessels were boarded on arrival - an increase of 143, or approximately 25% above the figure for such vessels during the previous year. A high proportion of these were from ports and seaboards classified as being infected with one or more of the major infectious diseases. Fifty-five were from Plague-infected ports.

No major infectious illness entered the port during this period but, as stated in previous reports daily visiting by port health inspectors, thorough inspection for rat evidence, trapping and fumigating when necessary, and the use of rat guards on moorings to prevent the passage of rats from ship to shore are now routine precautions and were in operation in respect of all vessels from infected or suspected ports.

The port medical officers dealt with 30,076 passengers and crew, of whom 739 were referred to clinic, hospital or to Federation doctor for treatment or observation.

FOREIGN PORTS FROM WHICH VESSELS ARRIVE.

EUROPE

- North - Abo, Amsterdam, Antwerp, Arramanches, Burea, Delfzyl, Gdynia, Gefle, Ghent, Gotenburg, Granville, Greaker, Hamburg, Helsingfors, Hernosand, Holmsund, Hommelvik, Hudiksvall, Jakobstad, Kaleningrad, Karlmar, Karlochan, Karlsborg, Kasko, Kotka, Kristiansand, Lubeck, Nemours, Norrkoping, Norrsund, Oskarshamn, Oslo, Pitea, Raumo, Riser, Rotterdam, Sarsborg, Skien, Skoghall, Skutskar, Stettin, Stockholm, Sundsvall, Ternauzen, Toppila, Trondheim, Valdemars Vik, Varberg, Vifstavarv.
- South - Algerceras, Barcelona, Bilbao, Bordeaux, Brest, Cadiz, Cartegena, Catania, Cherbourg, Cyprus, Genoa, Gibraltar, Istanbul, Leghorn, Le Harve, Lisbon, Malaga, Malta, Marseilles, Messina, Nantes, Naples, Oporto, Piraeus, Rouon, Santander, Seville, Spezia, Tornay, Charente, Trieste, Valencia.

AFRICA

- Accra, Alexandria, Algiers, Bathurst, Beira, Capetown, Casablanca, Dakar, Durban, Freetown, Gandia, Lagos, Lorenzo Marques, Mombassa, Oran, Port Elizabeth, Port Said, Port Sudan, Sfax, Sierra Leone, Sousse, Suez, Takoradi, Tiko, Tripoli, Warri, Winneba -
ISLANDS - Cannary, Cape Verde, Mauritius.

ASIA

- Abadan, Basra, Bahrein, Bangkok, Bombay, Calcutta, Chittagong, Chochin, Haifa, Izmir, Jaffa, Karachi, Madras, Mormagao, Ormuz, Penang, Port Swettenham, Rangoon, Saigon, Shanghai, Singapore, Vizagapatam.

AMERICA

**NORTH
CANADA.**

- Fort Churchill, Halifax, Montreal, Quebec, St. John - M.B., Sorel, Sydney - C.B., Three Rivers, Vancouver.

- NEWFOUNDLAND** - Botwood, St. John's, Wabana.

U.S.A.

- Baltimore, Baton Rouge, Baytown, Beaumont, Boston, Brownsville, Charleston, Corpus Christi, Galveston, Houston, Lake Charles, Mobile, New Orleans, Newport News, New York, Norco, Norfolk, Philadelphia, Port Arthur, Portland Maine, Portland Oregon, Sabine, San Francisco, San Pedro, Savannah, Texas City, Wilmington.

- Central-** Antigua, Aruba, Barbados, Carapito, Cuba, Curacao, Demerara, Kingston, Maracaibo, Panama, St. Kitts, Trinidad,

- South** - Bahia Blanca, Buenos Aires, La Plata, Montevideo, Patagonia, Punta Arenas, Rio de Janeiro, Rosario, San Nicholas, Santos, Zarate.

AUSTRALIA

- Adelaide, Albany, Brisbane, Cairns, Freemantle, Geelong, Hobart, Melbourne, Newcastle, Port Pirie, Rockhampton, Sydney.

NEW ZEALAND

- Auckland, Bluff, Christchurch, Dunedin, Napier, New Plymouth, Wellington.

WATER SUPPLY.

For the purposes of the Port generally, water supplied by the Bristol Waterworks Company is available to all premises in the dock area.

For the purposes of shipping, fresh water mains, carrying the Bristol Waterworks supply, are laid on to the quayside berths.

Precautions are taken against contamination of standpipes and hoses used to convey water from the quayside mains to ships. They are regularly flushed out and cleansed; water is allowed to run free for a few minutes before being delivered to the ship's tanks: samples are periodically submitted for chemical and bacteriological analysis.

Only one water boat is available and this is used at the City docks. The Port Health inspector periodically examined this boat, and supervises when cleansing and cement washing becomes necessary.

PORT HEALTH REGULATIONS, 1933 and 1945.

"Declarations of Health".

Under a local arrangement with the Pilotage Board, Declaration of Health forms are handed to the Master by the Channel pilot in the Barry Roads. In most cases, these forms are completed for delivery to the port health inspector boarding the vessels on arrival.

"Boarding of vessels on arrival, notification and mooring".

All vessels, coastwise or from foreign, are boarded at the locks on arrival by the port health inspector on tidal watch. All vessels from foreign, and all vessels reporting sickness which arrive from foreign via a coastal port are boarded by the medical officer. "Infected" or "Suspected" ships are boarded by the medical officer and port health inspector at Walton Bay from a tug chartered for this purpose.

Arrangements exist for the notification to the Authority of inward vessels requiring special attention (wireless messages, land signal stations, information from pilots, customs officers, etc). Wireless messages, giving the name of the ship and the expected time of arrival, are relayed to "Portelth," Bristol, if there is any circumstance on board requiring the attention of the medical officer. The messages are forwarded from the Central Health Clinic to the port medical officer and the senior port inspector for appropriate action. Visual signals for transmission to the port medical officer may also be directed to the land signal station at Walton Bay. In addition, masters of foreign-going ships approaching the port are required to hoist whichever of the quarantine signals is appropriate as set out in the 1931 International Code of Signals for visual signals.

Mooring stations, designated under Article 10 are as follows:-

Inner -

Avonmouth.....	...	(a) Royal Edward Dock - North Wall.
		(b) Old Dock - Dolphin Buoy.
Bristol	...	Railway Wharf.
Portishead	...	No. 1. Shed.

Outer -

Avonmouth, Bristol and Portishead Docks - Walton Bay.

There are no standing exemptions from the provisions of Article 14 at this port for the reasons indicated in section "2" above.

All vessels referred to in Article 16 were boarded at the time of arrival by the port medical officer and the port health inspector and only one case of unauthorised boarding was dealt with throughout the year. A stern warning was issued on this occasion and no further trouble was experienced with the firm concerned. Boarding for reasons of urgency may be permitted by the medical officer under such conditions as may be imposed by him, but in no case is an individual, so authorised, allowed to leave a vessel until it is free from control under the Regulations.

Instances, such as were described in my previous report, of sailors "jumping ship" on arrival at the locks have not occurred during the year, but it should again be reported that, in general, very few steps are taken by ships' masters to secure compliance with the provisions of Article 16 (1).

"Medical attention and Hospital arrangements."

Arrangements have been made for premises and waiting rooms for medical examination. All reported cases of sickness among crew and passengers are examined on board at the time of arrival. Crew and passenger inspections are completed on board shortly after reaching berth. Adequate accommodation, if a detailed examination is required for any other purpose under the Regulation, is available in the medical inspection room of the new port health office, constructed in 1943.

The cleansing and disinfection of infected ships' quarters is carried out under the supervision of the inspectorial staff whenever necessary, using the appropriate disinfectant. Clothing, bedding and other articles are removed by van and treated by steam under pressure at the city disinfecting station. The cleansing of persons is provided for at the city cleansing station. A "typhus scheme" is in operation, whereby delousing of patients or contacts may be carried out by trained and protected teams using D.D.T. powder blowers.

Patients for whom temporary accommodation is required for the purposes of the Regulations, and hospital accommodation available for plague, cholera, yellow fever, smallpox and other infectious diseases is provided. Patients suffering from infectious disease, and all cases requiring observation are removed to the city isolation hospital at Ham Green.

Ambulance transport is provided for by ambulances belonging to the city.

Supervision of contacts - Inspectors make daily visits to all vessels from infected or suspected ports and secure a signed report on the health of crew from the officer-in-charge. Any sickness developing after arrival is thus brought immediately to the notice of the medical officer. When surveillance is required, forward notices, giving the appropriate information, are posted to the medical officers of health of the districts to which contacts proceed after leaving the ship.

All pathological and bacteriological examinations are conducted at the Preventive Medicine Laboratories at Canynge Hall. Rats from vessels and quays are systematically examined for evidence of plague. Water samples from hydrants or ships' tanks, and articles of food are examined chemically and bacteriologically when the occasion demands.

"Arrangements for the treatment of the venereal diseases."

Full information concerning the location and hours of opening of the venereal disease centres at Avonmouth docks and at Bristol is given to the crew of every vessel entering the port. This information is contained in handbills, available in several languages, which are freely distributed to each ship. When indicated in-patient treatment, under the direction of the venereal diseases consultant, is available at the Snowden Road Hospital.

The following table relates to seamen treated at the Avonmouth Centre during the years 1944 - 1947. It will be seen that compared with 1946, there is no significant decline in the incidence of syphilis; gonorrhoea has increased slightly. There are good grounds for presuming that a large number of cases recorded as non-venereal were in fact under surveillance, having been treated on board ship with sulphonamide tablets. The four or five-fold increase in the number of seamen seeking treatment from Avonmouth docks since the Centre was established in 1943 is being maintained, and there are indications that this will continue.

<u>Year</u>	<u>Syphilis</u>	<u>Soft Sore</u>	<u>Gonorrhoea</u>	<u>Non-V.D.</u>	<u>Totals.</u>
1944	154	19	159	311	643
1945	85	26	150	261	522
1946	67	27	254	291	639
1947	60	17	271	252	600

MEASURES AGAINST RODENTS.

Steps taken for detection of rodent plague in ships in the port.

Measures commence with the arrival of each ship from "foreign" when consideration is given to the bills of health, the deratisation certificate and the declaration of health signed by the master. The undisturbed surface of the cargo is examined prior to the commencement of the discharge and provides reliable evidence of the condition of each vessel with regard to rats. A thorough examination for signs of rat activity is continued during the time the cargo is being discharged.

Seventeen deratisation and one hundred and fourteen deratisation exemption certificates were issued during the year.

As a result of thorough inspection and trapping - measures which are applied to all cargo vessels - sixteen ships were found with moderate to pronounced rat infestation. Ten of these, from which two-hundred and forty-one rats were caught by trapping, were bound for other United Kingdom ports, either with part cargo for discharge, or for extensive overhaul and repair. In every instance the usual "guarantee" forms were signed by the masters, and forward notices were sent to the appropriate Port Health Authorities. The remaining six ships were fumigated at this port and three-hundred and forty-nine rats were recovered (170 trapped and 179 by fumigation). A further eleven ships were fumigated at the request of the owners. Fumigation is carried out annually by certain shipping companies to ensure that their ships are maintained in a rat-free condition. A worthwhile precautionary measure, as only nine rats were found in three of these ships, the remaining eight being rat free.

It may be of interest to mention that in the case of one of the above-mentioned ships with a part cargo for another port, thirty-eight dead rats were found in a hold containing bagged flour. The flour had been badly damaged by salt water due to very rough weather experienced on the voyage. As the possibility of plague infection could not be excluded, all necessary precautions were taken and the rats were immediately submitted for examination. It is probable that the deaths were due to asphyxia, connected in some way with the fermentive process that had been set up in the flour.

As indicated in the tables a total of six-hundred and eighty rats were recovered from ships during the year and four-hundred and fifty-eight or 67% were sent to the Department of Preventive Medicine for examination. No B.Pests was found in any of the rats examined.

Steps taken for the detection of rodent plague on quays, wharves, etc.

A total of one thousand six hundred and one, made up of one thousand and ninety brown and five hundred and eleven black rats were destroyed in these areas during the year. The comparative figures for the previous year were two thousand six hundred and thirty-seven, two thousand three hundred and twenty-six and three hundred and eleven respectively. The number of brown rats destroyed has therefore decreased by more than half. This is undoubtedly due to the intensified repressive action taken during the past three years. We are now reaping the benefit of this campaign and if private industrial establishments within the dock area take more effective and continuous measures of control a further decrease can be expected.

Experience has shown that a site with pronounced infestation can be satisfactorily cleared by methodical pre-baiting, poisoning and trapping. Yet, if the site is subsequently neglected, for only a short period, signs of infestation soon re-appear. Intermittent treatment is of little value when dealing with rats, particularly in a dock area when conditions are so favourable for their existence and propagation. Continuous attack must be the aim if these destructive vermin are to be reduced to a satisfactory minimum.

The activity of the black rat has been confined to buildings within three well-defined areas in the dock. They were not active outside these areas. Careful inspection of large stacks of bagged commodities within the buildings gave little evidence of their presence. Trapping and poisoning often produced poor results; yet, when certain stacks were removed there was evidence which showed that rats had been harbouring and nesting in the centre of these stacks. Trapping on these sites had been more or less continuous and although no spectacular hauls have been made there has been a steady and satisfactory decline both in the number of rats and in the degree of activity. This was confirmed when some of the stacks were subsequently removed. In order to make the nesting places more accessible the authorities concerned have been advised to reduce the size of the stacks and to re-arrange the plan of stowage.

Of the one thousand six hundred and one rats caught during the year, seven hundred and twelve, or $44\frac{1}{2}\%$ were examined at the Department of Preventive Medicine and all were found to be free of plague infecting organisms.

Mice are also a source of danger to health apart from the extent of the damage that they cause. This damage is frequently to be seen in stacks of cereals, or animal food, especially when these have been stored for a considerable time. Special attention has been given to known focal points of heavy mouse infestation during the year, with excellent results. A total of two thousand one hundred and twenty-seven mice were caught in these places, and a further three hundred and ninety, making a total of two thousand five hundred and seventeen were recovered at other isolated foci of minor infestation.

Measures to prevent the passage of rats between ships and shore.

All vessels from infected or suspected ports are required to attach efficient rat guards to the mooring ropes.

Suitable lengths of tarred hessian are wrapped around moorings, outside the leads.

Gangways are well lighted at night and when possible are kept raised from the quay.

Methods of deratisation.

On ships fumigation with hydrogen cyanide gas is always recommended. Only two ships were fumigated with sulphur dioxide during 1947.

Premises within the vicinity of docks or quays where rat activity is discovered are subjected to frequent pre-baiting, poisoning and trapping.

Measures taken for the detection of rat prevalence in ships and on shore.

As outlined above, routine inspection is made for signs of rat activity on the undisturbed surface of cargoes prior to discharge. Follow up inspection, including sprinkled sand tests, are subsequently carried out. On shore, regular inspection of all premises and waste ground is made, particular attention being given to premises where foodstuffs are stored.

Rat-proofing.

The majority of docks, wharves, warehouses and private establishments within the dock area are of efficient rat-proof construction. In ships where rat-proofing could effectively be carried out without extensive structural alterations, the owners were recommended to do this work. In many ships, rat-proofing was found to be particularly necessary in respect of provision storerooms. In each case, the recommendations were complied with.

All buildings constructed in the dock area during the year were made effectively rat-proof. Similar attention was given whenever structural alterations were made to existing buildings.

HYGIENE OF CREWS' SPACES.

Foreign-going vessels.

This important branch of Port Health work has again claimed a great deal of time and attention, 3107 visits having been made by the Inspectorate. Defects under the heading of dirt, vermin and other nuisances are again to the fore. 603 defects were discovered in 183 British and 37 in 28 foreign-owned ships.

These records show that the number of British ships with dirty or vermin-infested quarters is high. An improvement in this direction was hoped for but is not very noticeable, despite the fact that nearly all the ships inspected were provided with accommodation of an improved standard. These defects were invariably due to carelessness and indifference on the part of certain members of the crew. The advent of the Merchant Navy Establishment System, whereby a seaman has the opportunity of continued employment for a minimum period of two years may in due course influence certain types of seamen - if only in their own interest - to a greater appreciation of the need for hygienic and clean habits.

The figures for defects due to wear and tear are more favourable. Only 130 defects mostly of a minor nature and due chiefly to rough usage and neglect, were reported on 58 of the 460 ships inspected.

No outstanding constructional defects requiring the attention of the Ministry of Transport Surveyor were discovered during the year. This is due to the fact, already mentioned, that the accommodation on nearly all the ships inspected conformed to modern standards. Informal approach was made with regard to defective ventilation on one vessel undergoing reconstruction and the matter was rectified.

Coastwise Vessels.

One thousand four hundred and forty-two visits were made to British coastwise vessels, and seventy-six to foreign owned coastwise vessels during the year. These figures refer to visits made to the type of coastwise vessel trading outside the limits of the Bristol channel, and not to the small craft included in the Port Authority's annual returns of coastwise arrivals. The latter ply only a short distance from the port, keeping within the Channel limits and the upper navigable reaches of the Severn. They frequent the dock as often as three or four times a week. Visits made to these craft during the year numbered 426.

The standard of cleanliness in coastwise vessels has been reasonably good, and the number of defects comparatively low. This may be partly due to the fact that the men usually remain in these ships for long periods and accordingly take a greater interest in their "floating home".

FOOD INSPECTION.

Compared with the year 1946 there has been an increase in the importation of most food stuffs. These increases have applied chiefly to grain and cereal products, fruit, canned and frozen meat. The figure for frozen meat alone is 39,000 tons higher than that for 1946 (97,000 tons compared with 58,000 tons).

As stated in previous reports, frequent visits are made every day to ships and transit sheds whilst cargoes are being discharged. Percentage inspections are carried out and damaged foods are detained for further appropriate action. Factors governing the stowage and the handling of imported foods, as well as the measures taken to prevent contamination, vary with the different commodities. This is borne in mind by the inspectors, and they ^{are} constantly on the alert to detect any abnormal conditions likely to affect these products adversely. Most cargoes of food arrived in good condition and were handled with care. It was necessary however in some cases to draw the attention of cargo representatives to inadequate wrappings and to evidence of careless handling of some of the meat cargoes at certain of the loading ports.

A total of 244 containers of bananas, over-ripe for dispatch, but fit for immediate use, were collected and distributed to the various childrens' hospitals in the City. These arrangements were made possible through the permission of the Ministry of Food and the invaluable and kindly help of Messrs. Elder & Fyffe's representatives.

Public Health (Cleansing of Shellfish) Act, 1932.

Public Health (Shellfish) Regulations, 1934.

There are no shellfish beds or layings with the jurisdiction of the Bristol Port Health Authority. The supply of shellfish marketed in Bristol is obtained mainly from the following sources :-
Cockles from St. Clair, South Wales, and King's Lynn, Norfolk.
Escallops from Brixham, South Devon. Mussels from Appledore, North Devon and St. Clair, South Wales. Oysters from Cornwall, others from Thames Estuary and Continental countries via London. Winkles from Appledore, North Devon. Whelks from King's Lynn, Norfolk.

PARROTS (PROHIBITION OF IMPORT) REGULATIONS, 1930.

Four vessels arrived in 1947 with six birds of the parrot specie on board. Importation was prohibited under the regulations.

WATER SAMPLING.

Routine sampling of ship supply fresh water was carried out during the year. These samples were obtained from various standcocks situated on the docks.

Samples of drinking water were also taken from ships on complaint.

FOOD SAMPLES.

Samples of Food examined by Bacteriologist and Analyst.

No. of Samples submitted.	Articles.	Examined for.	Result.
4 tins.	Steak & Kidney Pudding, canned.	Soundness.	3. Genuine. 1. Unfit for food.
2 "	Rasher Bacon, canned.	"	2. Unfit for food.
2 "	Peaches, canned.	"	2. Genuine.
32 "	Evaporated Milk, canned.	"	27. Genuine. 5. Unfit for food.
1 "	Corned Beef, canned.	"	1. Genuine.
16 "	Boiled Beef & Carrots, canned.	"	14. Genuine. 2. Unfit for food.
14 "	Stewed Steak, canned.	"	14. Genuine.
2 "	Flour	"	2. Unfit for food.
2 "	Flour	"	2. Genuine.

MEATS (Condemned).

DESCRIPTION	Diseased; Decomposition and mould.	Brine-Stain.	Contamination and taint.	TOTALS.
	T. C. Q. lbs.	T. C. Q. lbs.	T. C. Q. lbs.	T. C. Q. lbs.
BEEF	2.16. 0. 6.	- 5. 0. 6.	- 11. 1. 6.	3.12. 1. 18.
MUTTON & LAMB	1.14. 1. 18.	- 2. 2. 10.	2.12. 1. 1.	4. 9. 1. 1.
PORK	- 4. 0. 24.	- - - -	- - - -	- 4. 0. 24.
VEAL	- 2. 0. 14.	- - - -	- - - -	- 2. 0. 14.
OFFAL	1.16. 2. 26.	- 3. 0. 6.	- - - 10.	1.19. 3. 14.
PREPARED MEATS	- 2. 1. 5.	- - - -	- - - -	- 2. 1. 5.
POULTRY	- - 3. 21.	- - - -	- - - -	- - 3. 21.
TOTALS.	6.16. 3. 2.	- 10. 2. 22.	3. 3. 2. 17.	10.11. 0. 13.

CANNED FOODS (Condemned).

No. of Tins.	Description	Why Condemned	T. C. Q. lbs.
11,725	Canned Meats.	Blown, Burst, Rust holed, Crushed & Pierced.	7.12. 1. 14 $\frac{1}{2}$.
7,295	Evaporated Milk.	... ..	2.19. 0. 4 $\frac{1}{2}$.
68	Canned Fish.	... ..	2. 5 $\frac{1}{2}$.
93	Canned Vegetables	... ..	1. 2. 2.
79	Canned Jams.	... ..	1. 0. 25.
1,208	Canned Fruits.	... ..	1. 5. 3. 4 $\frac{1}{2}$.
17	Canned Tomatoes.	... ..	1. 14.
103	Canned Tomato Juice	... ..	1..1. 27.
55	Canned Tomato Puree	... ..	- 4. 3. 22.
Totals			12. 7. 1. 7.

MISCELLANEOUS FOODS (Condemned).

Description	Why Condemned	Weight
		T. C. Q. lbs.
Fresh Fruit.	Decomposed and Gross contamination.	16. 7. 1. 14.
Dried Fruit.	Fermentation, Mould and Perished, Fruit Beetle Infested and Gross Contamination.	4. 2. 2. 24.
Fresh Vegetables.	Decomposed.	41. 1. 2. 26.
Rolled Oats.	Moisture Contaminated and Rancidity.	- 17. 1. 8.
Quaker Oats.	Salt-water Contamination.	- 1. 3. 10.
Yeast.	Decomposed, Sourness and Rancidity.	- - 2. 6.
Egg Powder.	Dock Water Contaminated.	- - 2. 11.
Fish (Frozen)	Decomposed.	- 3. 0. 14.
Vinegar.	Mould Contamination.	- 1. 3. 0.
Chestnuts.	Mould and Decomposed.	1. 0. 2. 4.
Gooseberry Pulp.	Dirt Contaminated.	- 4. 2. 0.
Flour.	Sourness and Fermentation.	263. 0. 0. 0.
Totals		327. 2. 0. 5.

Particulars of Foods Detained for Reconditioning at Local or other Food Depots.

(Forward notices sent to the appropriate health authorities when damaged foods were released to reconditioning depots outside Bristol).

Description of Food.	Quantity	Reason for De tention	Weight in Tons (approx.)
Frozen Lambs	11,401	Taints & Contamination	183 $\frac{3}{4}$
" Sheep	1,786	" " "	43
" Beef	810	" " "	60 $\frac{1}{4}$
" Pork	710	" " "	21
Bags Sheep & Lamb Offal	10	" " "	- $\frac{1}{4}$
" Beef Offal.	589	" " "	17
" Pig Offal	4	" " "	- $\frac{1}{4}$
Canned Fruit (Cases)	284	Stained Cases	5 $\frac{3}{4}$
" Milk "	943	" "	20 $\frac{1}{4}$
Dried Fruit (Boxes)	420	" Boxes	5 $\frac{1}{4}$
Lard "	43	Contamination	10
Cocoa (Bags)	128	"	17 $\frac{3}{4}$
Flour "	3,577	Wet damaged	223 $\frac{1}{2}$
Potatoes (Bags)	83	Decomposing	3 $\frac{3}{4}$
Total approximate tonnage involved			611 $\frac{3}{4}$

1. - Amount of Shipping entering the Port during the year - 1947

(AVONMOUTH, PORTISHEAD and BRISTOL DOCKS)

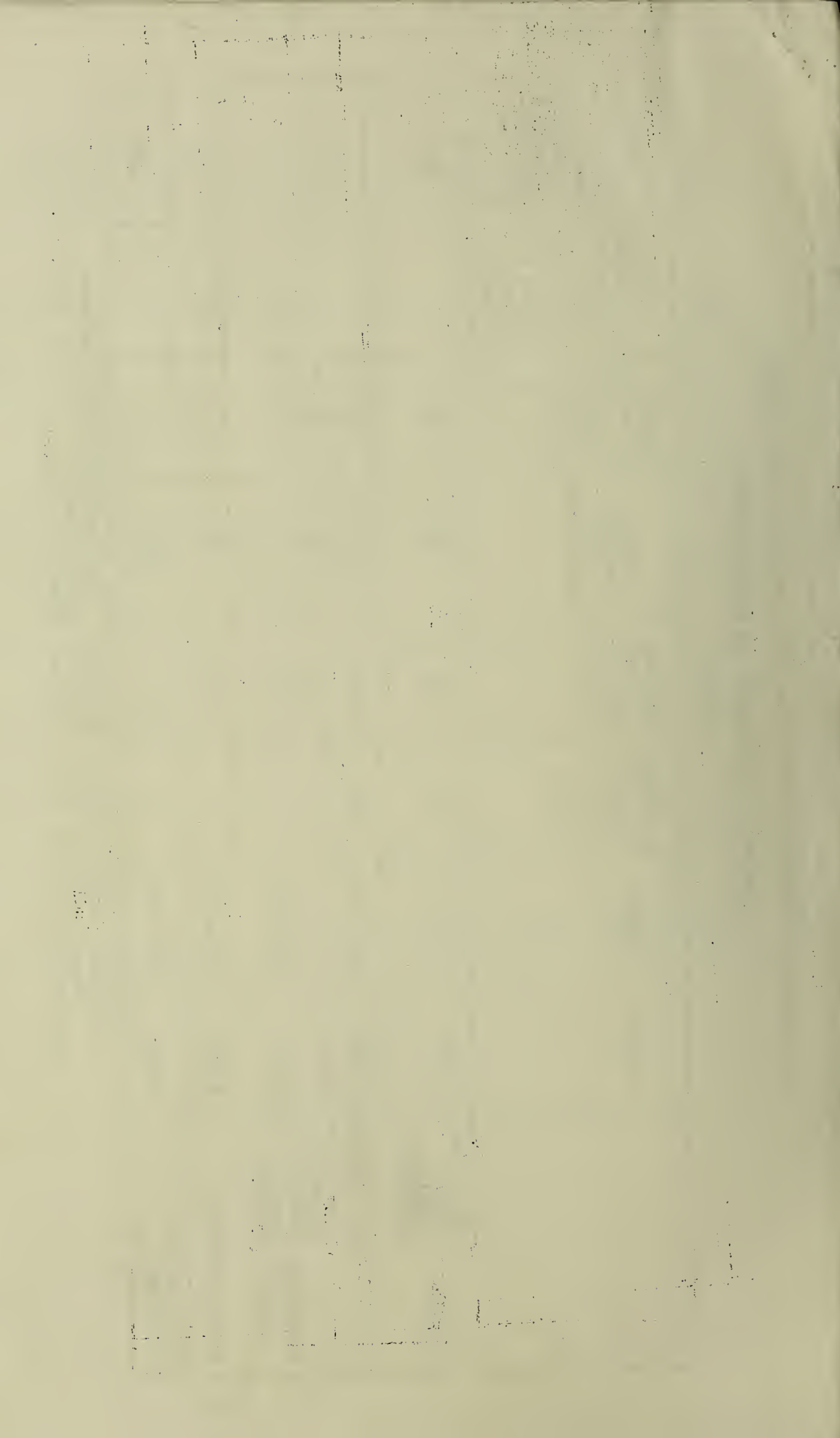
Table A.

	Number *	Tonnage *	Number inspected		Number reported to be defective	Number of vessels on which defects were remedied	Number of vessels on which defects were found and re- ported to Ministry of Transport Surveyors	Number of vessels reported as having, or having had, during the voyage in- fectious disease on board.
			By the Medical Officer of Health	By the Sanitary Inspector				
FOREIGN	708	2,213,398	536 172	536 172	199 27	194 25	- -	14 6
Total Foreign	708	2,213,398	708	708	226	219	-	20
COASTWISE	8,908	1,204,537	2 1 - -	435 243 - -	52 3 - -	50 3 - -	- - - -	3 1 - -
Total Coastwise	8,908	1,204,537	3	678	55	53	-	4
Total Foreign and Coastwise	9,616	3,417,935	711	1,386	281	272	-	24**

+ Includes mechanically propelled vessels other than steamers.

* Figures supplied by Port Authority. The foreign tonnage includes vessels entering from a coastwise port to load for a foreign port.

** Excluding vessels having venereal disease on board.



II.-Character of Trade of Port

Table B.

(a) Passenger Traffic during the year - 1947

No. of passengers	1st Class	2nd Class	3rd Class	Transmigrants	Totals
Inwards					
Aliens	104	-	-	-	104
British	1,992	-	-	-	1,992
Outwards					
Aliens	111				111
British	1,702				1,702

The foreign ports from which passengers principally arrived were:-

Bermuda; Kingston; Abadan; Bahrain; Basra; Montreal and Halifax;
 New Orleans, San Francisco and New York; Auckland; Melbourne; St. John, N.B.;
 Rangoon; Aruba; also North & West African Ports and South American Ports.
 Bermuda; Kingston; Abadan, Bahrain and Basra; Montreal and Halifax;
 New Orleans, San Francisco and New York; Auckland; Melbourne; St. John, N.B.;
 Rangoon; Aruba; also North & West African Ports and South American Ports.

(b) Cargo Traffic.

PRINCIPAL IMPORTS - 1947

COMMODITIES			TONS
Grain	Tons	-	713,095
Oilseeds and Nuts	"	-	28,824
Feeding Stuffs	"	-	75,583
Cereal products for human consumption.	"	-	116,580
Cocoa (and Chocolate)	"	-	23,807
Eggs - Fresh and Dried	"	-	7,081
Fruit :			
Bananas	Bunches	2,031,546	23,028
Oranges & Lemons	Cases	219,827	10,448
Other Green Fruit	Tons	-	25,579
Canned	"	-	5,939
Dried	"	-	19,904
Milk - Dried and Evap.	"	-	12,697
Metals and Ores :			
Brass	"	-	134
Copper	"	-	24,017
Iron	"	-	7,984
Lead	"	-	7,308
Spelter	"	-	5,593
Zinc Concentrates	"	-	67,368
Paper	"	-	23,677
Petroleum	"	-	1,255,294
Phosphate of Lime	"	-	103,523
Provisions :			
Bacon	"	-	3,454
Butter	"	-	25,889
Cheese	"	-	32,313
Lard	"	-	1,259
Canned Meat	"	-	31,340
Frozen Meat	"	-	97,473
Sugar :			
Refined	"	-	-
Unrefined	"	-	10,614
Glucose	"	-	-
Molasses	"	-	25,747
Tobacco	"	-	24,655
Wine	Pipes	8,195	4,917
	Dozens	3,640	91
Spirits	Pipes	1,270	762
	Dozens	36,915	738
Wood & Timber	Tons	-	171,551
Woodpulp	"	-	61,726
All Other Goods	"	-	172,100
Total Foreign Imports			3,222,092

PRINCIPAL EXPORTS - 1947

COMMODITIES	TONS.
Chemicals :	
Salt Cake	6,715
Other Kinds	2,524
Clay	8,887
Coke	-
Earths	805
Iron	12,104
Paper	434
Strontia	3,884
All other Goods	56,482
Total Foreign Exports	91,835

Table C.

Cases of Infectious Sickness landed* from Vessels

Disease	No. of cases during 1947		No. of Vessels concerned	Average No of cases for previous 5 years
	Passen- gers	Crew		
Infectious diseases including :-				
Pulmonary T.B.	2	6	8	15.2
German Measles	-	1	1	3.4
Influenza	-	12	8	5.3
Dysentery	-	1	1	1.0
Malaria	-	1	1	10.8
Pneumonia	-	1	1	3.8
Venereal Disease... ..	-	566	255	401.6

Other diseases not included in Table C above landed* from vessels

Disease	No. of cases during 1947		No. of Vessels concerned	Average No. of cases for previous 5 years
	Passen- gers	Crew		
Rheumatism	-	1	1	2.6
Diseases of nervous system	-	7	7	18.2
" " circulatory system	1	2	3	6.6
" " respiratory system	-	7	7	9.6
" " digestive system	2	33	32	34.4
" " genito urinary system	-	1	1	4.6
" " skin and cellular tissue	-	45	31	30.0
" " bones and organs locomotion	-	1	1	8.0
Traumatism	1	16	16	31.8
Ill-defined diseases ...	-	7	6	10.0

* Includes only cases requiring medical attention, but all were not removed from ships to hospital.

Table D.

Cases of Infectious Sickness occurring on Vessels during the voyage but disposed of prior to arrival

Disease	No. of cases during 1947		No. of Vessels concerned	Average No. of cases for previous 5 years.
	Passengers	Crew		
Infectious diseases, including :				
Malaria	-	17	1	7.4
Dysentery	1	-	1	0.4
Suspected Scarlet Fever	-	1	1	0.2
Chicken Pox	3	-	2	1.8

Other diseases not included in Table D above occurring on Vessels during the voyage but disposed of prior to arrival

Disease	No. of cases during 1947		No. of Vessels concerned	Average No. of cases for previous 5 years
	Passengers	Crew		
Diseases of nervous system	-	2	2	1.8
" " circulatory system	-	2	2	0.6
" " respiratory system	-	3	3	0.2
" " digestive system	3	3	4	1.3
" " genito urinary system	-	1	1	0.0
" " skin & cellular tissue	-	1	1	0.8
Traumatism	-	2	2	0.8

OFFICIAL
MEMO TO
RECEIVED
BUREAU

RECEIVED
BUREAU

RECEIVED
BUREAU

RECEIVED
BUREAU

RECEIVED
BUREAU

Rats destroyed during the year - 1947

Table F. (2) In Docks, Quays, Wharves and Warehouses.

[illegible]

Table G.

Measures of Fat Destruction on Plague "infected" or "suspected" Vessels or Vessels from Plague infected ports arriving in the Port during the year - 1947

Total number of such Vessels arriving	Number of such Vessels fumigated by SO ₂	Number of Rats killed	Number of such Vessels fumigated by H.C.N.	Number of Rats killed	Number of such Vessels on which trapping, poisoning, &c., were employed	Number of Rats killed	Number of such Vessels on which measures of Rat destruction were not carried out
1.	2.	3.	4.	5.	6.	7.	8.
57	-	-	*3	101	20	63	37

* One vessel fumigated at the request of the Ministry of Food Infestation Department.

TABLE H.

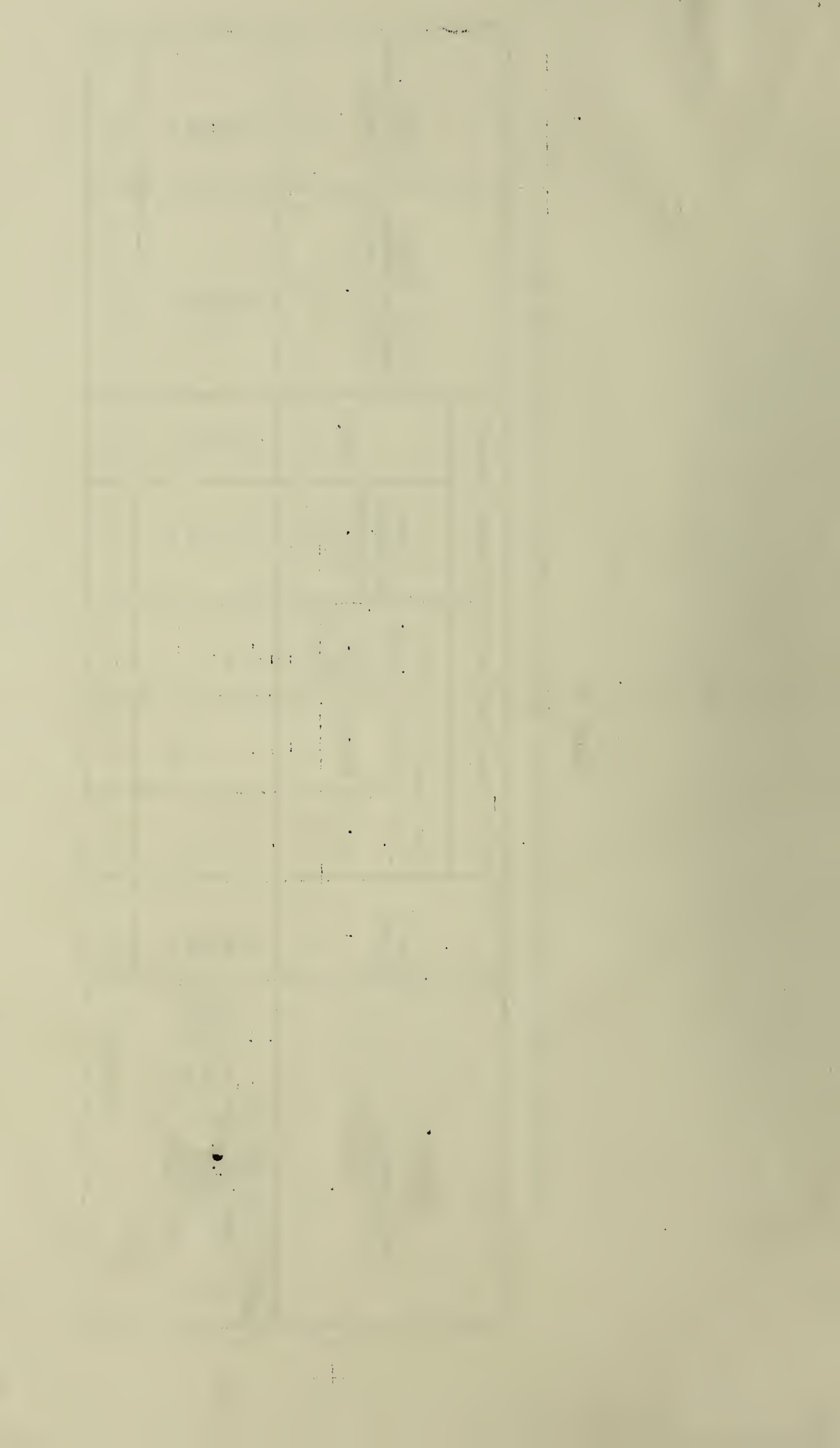
Deratisation Certificates and Deratisation Exemption Certificates issued during the year - 1947.

Net Tonnage.	No. of Ships.	No. of Deratisation Certificates Issued						No. of Derat- isation Exemp- tion Certificates	Total Certificates issued.
		After fumigation with			After Trapping Poisoning etc.	Total			
		H.C.N.	Sulphur	H.C.N. and Sulphur					
							H.C.N.			Sulphur	H.C.N. and Sulphur
1.	2.	3.	4.	5.	6.	7.	8.,	9.	
Ships up to 300 tons	6	1	-	-	-	1	5	6	
" from 301 tons to 1,000	18	-	-	-	-	-	18	18	
" " 1,001 " to 3,000	19	2	-	-	-	2	17	19	
" " 3,001 " to 10,000	88	12	2	-	-	14	74	88	
" over 10,000 tons	-	-	-	-	-	-	-	-	
Totals:-	131	15	2	-	-	17	114	131	

TABLE H.

Deratisation Certificates and Deratisation Exemption Certificates issued during the year - 1947.

Net Tonnage.	No. of Ships.	No. of Deratisation Certificates Issued					No. of Derat- isation Exemp- tion Certificates	Total Certificates issued.
		After fumigation with				After Trapping Poisoning etc.		
		H.C.N. Sulphur	Sulphur	H.C.N. and Sulphur	Total			
1.	2.	3.	4.	5.	6.	7.	8.,	9.
Ships up to 300 tons	6	1	-	-	-	1	5	6
" from 301 tons to 1,000	18	-	-	-	-	-	18	18
" " 1,001 " to 3,000	19	2	-	-	-	2	17	19
" " 3,001 " to 10,000	88	12	2	-	-	14	74	88
" over 10,000 tons	-	-	-	-	-	-	-	-
Totals:-	131	15	2	-	-	17	114	131



VI. Hygiene of Crew's Spaces.

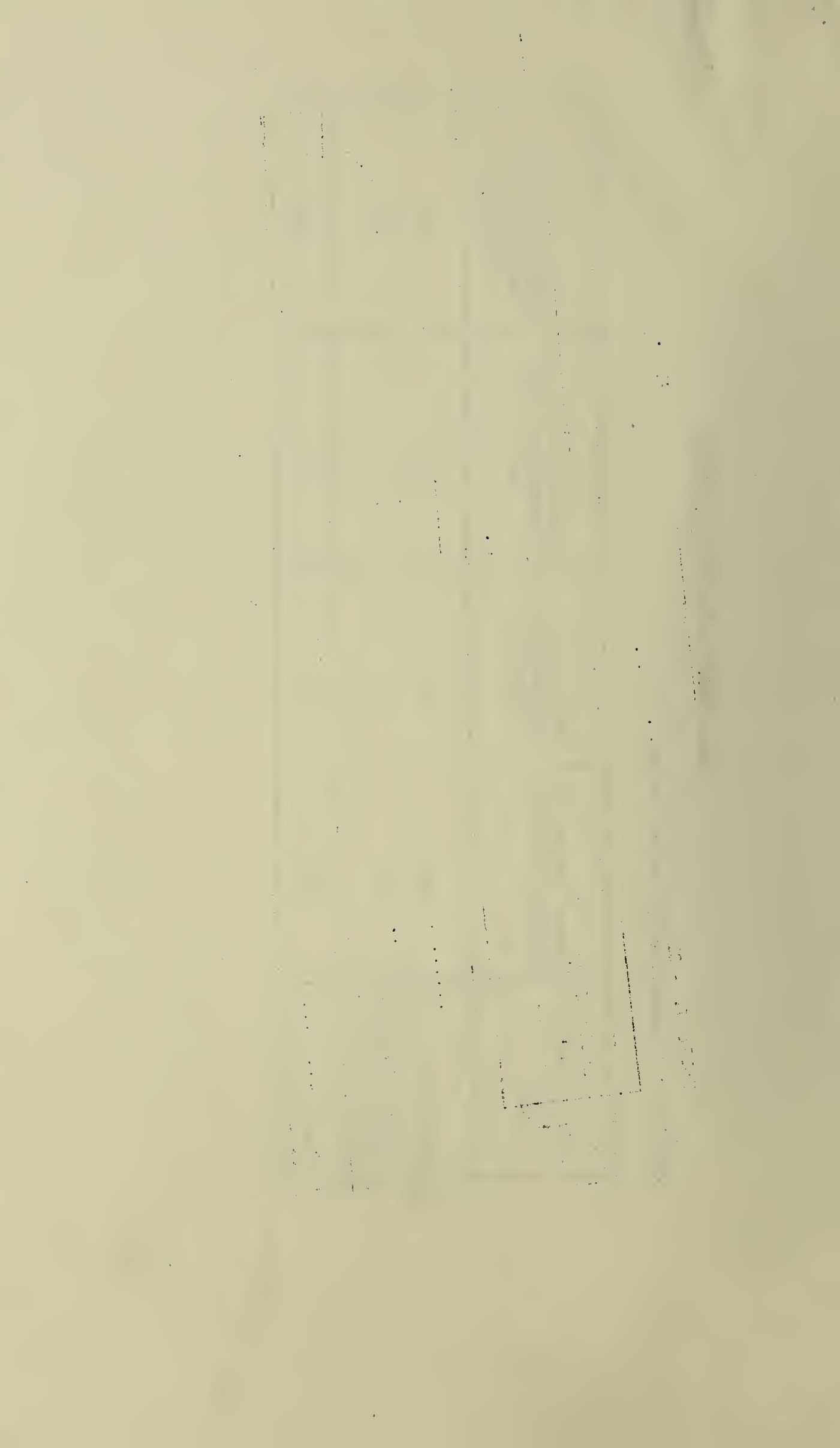
Table J. - Classification of Nuisances.

Nationality of Vessel	Number inspected during the year	Defects of original con- struction.	Structural defects through wear and tear.	Dirt, vermin and other conditions prejudicial to health.
British.....	1101	12	134	688
Other Nations..	285	-	-	37
Totals.....	1386	12	134	725

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Totals.....	1386	12	134	725



MEDICAL INSPECTION OF ALIENS

Annual return by the Medical Inspector of Aliens for the year ended 31st December, 1947

	TOTAL	Number Inspected by the Medical Inspector	Number subjected to detailed examina- tion by the Medical Inspector	Certificates issued					Trans- migrants
				Lunatic idiot or M.D.	Undesir- able for medical reasons	Physically incapa- citated	Suffering from acute infectious disease	Landing necessary for adequate medical examina- tion	
(a) Total number of Aliens landing at the Port ...	104	104	26	-	-	-	-	1	-
(b) Aliens refused permission to land by Immi- gration Officer	29	29	-	-	-	-	-	-	-
(c) Transmigrants	-	-	-	-	-	-	-	-	-
Total Aliens arriving at the Port ...	133	133	26	-	-	-	-	1	-

Total number of vessels carrying Alien passengers... 83 (50 in, 33 out).

Number of Vessels dealt with by the Medical Inspector ... 50

